



THOMAS G. NEWMAN,
EDITOR.

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W. M. Barnum, of Angelica, N. Y., on March 11, 1889, says:

My bees appear to be wintering well. This is the general report of the condition of bees this spring, so far.

The Weather is so mild on the coast of North Wales that primroses, violets, snow-drops, chrysanthemums and roses are growing in the open air. The songs of the thrush and black-bird are heard daily.

The Eastern Markets being glutted with oranges, the Southern California growers lately ceased picking for a week. The orange crop in Florida is so great, and prices so low, that much of the fruit is allowed to rot on the ground.

Bee-Candy.—The *British Bee Journal* says: "What is known as Good's candy... should be properly called Scholtz's candy, as this gentleman was its discoverer." Perhaps brother I. R. Good will tell us about that; or is the above item news to him as well as to many others?

Feeding Rye Flour to bees is a seasonable matter now, and Mr. B. F. Sheets, of Wellington, Ills., made this request on March 9, 1889:

Please tell me in next week's BEE JOURNAL just how to feed rye flour to my bees. The BEE JOURNAL has given me lots of valuable information about bees. I am only a beginner in the art of bee-keeping.

It should be put where the bees can get at it. Dr. Miller says: "The best way I have tried is to take hive covers 6 or 8 inches deep, put a stone under each near the middle, and put the rye meal on them. As often as the bees work down the feed, turn the cover around so as to leave feed at the upper end." It should be covered so that rains would not make it wet.

Lynch Law.—Much has been heard of Lynch law, and perhaps it would not be amiss to record its origin. Mr. E. C. Jordan, of Jordan's Springs, Va., writes as follows:

Henry Howe's history of Virginia, published in 1845, on page 212, tells when and how "Lynch law" originated. The enclosed paragraphs were published in our local papers at a request. I hope you may think it worthy of a place in your paper:

ORIGIN OF LYNCH LAW.—Lynch law is pretty generally understood as the taking of life, without process of law, of a felon who has been convicted at the bar of public opinion of an offense deserving of death. But it is not so generally known that the name originated in Campbell county, Va., before the Revolutionary war. At that period the country was thinly settled, and was infested with Tories and desperadoes—too many of them, apparently, for the local authorities to adequately punish. Col. Charles Lynch, a distinguished officer of the Revolutionary army, undertook to rid his county of the outlaws. He organized a force, arrested the outlaws, and having satisfied himself and comrades of the accused, executed them without reference to the constituted authorities.

While not altogether approving of the desperate remedy for a desperate cause, the beneficial effect of Col. Lynch's action was recognized, and has since been known as "Lynch's law," or "Lynch law."

Lynch's process of meting out speedy justice extended to other parts of the country, and is a well recognized form of redress of grievances to-day, particularly for that class of offenses that are popularly believed not to be adequately punished by the statutes and courts of the State. Col. Lynch's brother gave his name to, and founded Lynchburg, and left a son who was subsequently Governor of Louisiana.

Died at Quincy, Ills., at 1:30 a.m., on Sunday, March 10, 1888, Mr. C. H. Smith. Mr. Allen Lewton writes us as follows concerning the demise:

DEAR EDITOR:—I send you a notice of the death of our friend and brother bee-keeper, Mr. C. H. Smith, who has passed to the summer land, and left his 118 colonies of bees to be manipulated by other hands. He leaves a loving wife and four little children to battle with the cold world. He was one of the foremost and best-posted bee-keepers of this section.

The particulars sent are as follows, gathered from a Quincy daily paper:

Mr. Smith was born in New Orleans, La., in 1852, and next May would have been 37 years of age. In 1874 he came to this city, where he has since resided, marrying a daughter of Mr. Summers, pattern-maker at Thomas White's stove foundry. For years he has been engineer at White's foundry, until recently, when he was taken down with inflammation of the bowels. After suffering for some time he grew better, and his friends looked forward to his recovery, but two weeks ago he took a relapse, from which he never recovered.

How to Build a House.—This is the title of a new book containing plans and specifications for 25 houses of all sizes, from two rooms up; also, engravings showing the appearance of houses built from the plans given. It also contains much that is valuable to those who intend to build. Price 25 cents. Published by J. S. Oglivie, 57 Rose Street, New York.

Bees' Visits to Flowers.—Mrs. M. B. Chaddock, in the *Popular Science Monthly* for February, takes exception to an article which appeared in the October number of last year, from the pen of Mr. Grant Allen, concerning the visits of bees to one particular species of a plant at one time when in quest of honey. She remarks as follows in her own vigorous style:

It is not true that bees only visit one species of plants on each trip. Bees will go from the red to the black-cap raspberry and gather honey from both; and from our sweetest and best grafted apple-trees to the green, bitter, wild crab. Because bees and insects do go helter-skelter among the flowers, we are always budding and grafting, and are never sure of any of our fruits that come from the seed. To prove this, let any one take some flour and stand among the red and black-cap raspberries where they grow close together, when the bees are roaring around them; put some flour on a bee's back, and then watch it go from blossom to blossom. I think it must convince the most skeptical of two things: First, that bees work on different species; and, second, the bees know nothing, and care less, about the good of the species. I say it is not true that bees work on the same species while on a trip after honey or pollen. I claim much more than this. They work on the flowers of different families. To prove this, go into a garden of flowers during a dearth of nectar, and watch the bees go from flower to flower. They will tumble around among the petals of any blossom that contains either pollen or nectar, mechanically and indiscriminately.

The January Number of the *Bee-Keepers' Magazine* has just come to hand. It contains an apology for being so tardy, and an announcement of its sale to the *Bee-Keepers' Advance*. Brother Aspinwall bids us all "adieu" in language as follows:

It is not without many sighs of regret, we say good-bye to our many readers, yet we feel it is our best course.... The irregularity in appearance each month has worried the editor much, but the honest truth is that he has not had the time to devote to the work required of him as editor, proof-reader, advertising agent, subscription clerk, and many times, mailing clerk.

Shake hands, brother editors, of the agricultural world; we say good-bye with no feelings of malice towards any of you. Certain it is we have had tilts occasionally, but there was no malice on our side, only a belief in our being in the right; a simple difference of opinion.

Lastly, to our many readers, we must sorrowfully bid adieu—may God bless you all.

We wish the retiring editor success in his new vocation (at Washington, we believe), and hope it will be more pleasant and profitable than publishing the *Magazine* has been to him.

Catalogues for 1889 are on our desk from—

W. H. Norton, Skowhegan, Maine—1 page—Comb Foundation.

Wm. H. Bright, Mazepa, Minn.—20 pages—Bee-Keepers' Supplies.

S. H. Colwick, Norse, Texas—4 pages—Bees and Queens.

Lewis Roesch, Fredonia, N. Y.—6 pages—Grapevines, Small Fruit, etc.

GLEAMS OF NEWS.

Mr. Robinson, the one whose attack on the Rev. L. L. Langstroth was noticed on page 885 of our last volume, is so completely answered by Mr. Langstroth in the January number of the *Bee-Keepers' Magazine*, that he can offer no excuse even for his vile attacks on that gentleman.

Mr. Langstroth, after copying two articles entire from the AMERICAN BEE JOURNAL for 1881, on the subject, giving details, facts, and figures to disprove Mr. Robinson's bold assertions, quotes his letter to Mr. R., dated Feb. 26, 1881, the last paragraph of which reads as follows:

Now, friend Robinson, from all I have ever known of you, I must think that you are a man who desires to do what is right. Weigh well what I say, and if convinced that you have fallen into error, I feel confident that you will do what is fair and honorable for all parties in this matter.

Very truly your friend,

L. L. LANGSTROTH.

Mr. Langstroth then argues the matter as follows:

I received no reply to this letter, and I have seen nothing further from his pen about this matter until I had read his *Magazine* article; from which it appears, that he not only insinuates charges of bad faith against Mr. Parsons, but conveys the impression that he regards me as a joint conspirator with him.

Now, Mr. Editor, the plain English of all this is, that Mr. R. insinuates that Mr. P. stole bees belonging to other parties, and that we then engaged in the business of selling queens, bred from his stolen property! and he further wishes the public to believe that my statements as an eye witness to the facts are unworthy of credit. Can Mr. R. expect to find any credence given by honorable men, to such insinuations?

As, however, he singles me out for a direct charge, viz., that while my motto on paper is, "Give honor to whom honor is due," I have signally failed to practice what I have preached, and I have tried to rob a dead man of honor justly due him," I must ask a little more space to reply to this accusation. For what Mr. R. quotes and refers to as authority for his insinuations and charges, it would seem that he had access to all needed sources of information, and has therefore no valid excuse for the mistakes he has made.

In the March number of Vol. I. of the AMERICAN BEE JOURNAL, page 69, I am reported as saying to a convention that met in Cleveland, O., on March 15, 1880, "Last fall, Messrs. Wagner, Mahan, and myself had imported a few colonies of these bees, and this was prior to the importations of Mr. Parsons and the Patent Office." Does this look as though I wished to suppress the credit which belonged to Mahan and the Government for priority to Mr. Parsons?

Besides, my article in the AMERICAN BEE JOURNAL, from which Mr. R. quotes, declares plainly that Mahan's bees were on board the same steamer (in his own charge), that brought the bees for Wagner & Co. As regards Mr. R's attempt to make me guilty of "an outrage in attempting to wrest from Mahan the credit due to his enterprise," it seems to me hardly to deserve any serious notice.

We both admit that there was a struggle between two parties, as to who should have the honor to put ashore from the same steamer, the first Italian queen-bee. Neither of us pretends to have been an eye witness

to the scene. Mr. R. gives his hearsay version of the affair, and I give mine. If the German captain was able to gratify his pride, not only in having the first Italian bee imported into this country, in his own steamer, but to be able to say that he brought the first living queen ashore, it does not detract one iota from the merit due to Mahan, as being the first person to make a special voyage to Europe to procure this valuable bee.

Mr. P. G. Mahan was one of the most skillful manipulators of bees I have ever known, and his name is honorably mentioned a number of times by me in my work on the "Honey-Bee," for new and valuable observations. More than this, in my history of the importation of Italian bees, which Mr. R. criticizes so severely, it plainly appears that while all the queens imported by Colvin & Co., in 1859, died before the next spring—and while only one queen with a handful of bees survived to Mr. Parsons, Mr. Mahan had so distanced all his rivals, in preserving and breeding from his importation, as to be able to supply me with American bred specimens of the Italian variety.

L. L. LANGSTROTH.

Dayton, Ohio, Dec. 18, 1888.

Commenting upon the above, the editor of the *Bee-Keepers' Magazine* remarks thus:

Mr. Robinson, in a recent article, was very severe in his criticism of Rev. L. L. Langstroth. He made direct charges of bad faith against the latter, as well as Mr. Parsons, and we are glad that Mr. Langstroth has so carefully cleared up this matter, not in a spiteful manner, but by a statement of facts which can hardly be gainsaid. We believe in getting at the root of everything, and do not believe in hampering what might be the truth, by our personal opinion of an individual.

We are glad that Mr. Aspinwall, before retiring from the field, has done justice to Father Langstroth, by frankly calling his reply "a statement of facts which can hardly be gainsaid," which has "carefully cleared up this matter," etc. It has always been as clear as the noon-day sun to every one who wanted to know the truth.

The Annual Crop Report of the Department of Agriculture, just issued, shows that there is a larger aggregate product of cereals than has ever before been recorded. It will amount to about 3,200,000,000 bushels or, fully fifty bushels per head. This is about three times the average supply per capita of Europe from home production, and receipts from other countries amount to only about one bushel per head. The aggregate potato production is about 200,000,000 bushels. The wool clip of 1888 was slightly reduced in consequence of the reduction of flocks in Texas and elsewhere. The estimated product is 269,000,000 pounds. The meat supply has been very abundant.

The area of maize, as estimated for the crop of 1888, makes an increase of 3,280,043 over the crop of 1887 and 13,304,259 acres over the 1879 census, indicating a gain of 21 per cent. in nine years. The estimate of wheat area makes a reduction of 305,645 acres from the breadth of 1887. The aggregate is 37,336,198, an increase of only

1,905,805 on the area of 1879, or a little more than 5 per cent. The exports will probably be less than those of 1879-80 by at least 100,000,000 bushels, a quantity more than ample for the annual supply of all the increase of population since 1880. There appears to be a further increase of the area of oats, amounting to 1,077,376 acres, or about 41,000,000 bushels increase in the quantity produced. The yield per acre is 26 bushels against 254 bushels in 1887.

The Dog and the Bees.—A dog being annoyed by bees ran, quite accidentally, into an empty barrel lying on the ground, and, looking out at the bung-hole, addressed his tormentors thus:

"Had you been temperate, stinging me only one at a time, you might have got a good deal of fun out of me. As it is, you have driven me into a secure retreat; for I can snap you up as fast as you come in through the bung-hole. Behold the folly of intemperate zeal."

When he had concluded, he awaited a reply. There wasn't any reply, for the bees had never gone near the bung-hole; they went in the same way as he did, and made it very warm for him.

The lesson of this fable is, that one cannot stick to his pure reason while quarrelling with bees.—*Sel.*

Laughing.—Mr. C. Osborn, of Danville, Ind., on March 9, 1889, sends us the following:

DEAR SIR:—Could you afford to reprint in your valuable BEE JOURNAL Mr. Secor's "Removing Bees from the Cellar," and "What is the Use of having Friends," etc., for the special benefit of the bee-keepers of this vicinity? We have been two years without honey, and are so blue that we never laugh!

Oh! yes, we might reprint it sometime, as soon as we find room. It will help us all to "laugh and grow fat,"—grow more amiable and jolly as the years go around. It will never pay to be blue and melancholy! Never.

The April Number of Frank Leslie's *Sunday Magazine* is unusually rich in illustrated articles of present interest. Among them may be mentioned "American Engineers in Angola," by David Kerr; "Duluth and Environs," by William H. Ballou; "Through the Alleghenies on a Locomotive," by H. W. De Long. Easter coming in April, there are some poems referring to that festival, and an article and illustration on "Lily-Culture in Bermuda." Dr. Talmage's sermon is on "Easter Blossoms," and the music page is devoted to an "Easter Carol," by Arthur Henry Brown. The number also contains much interesting miscellany.



Bee-Killers (*Asilus Missouriensis*), Armed-Flies, Crane-Flies, Gad-Flies, Etc.

QUERIES REPLIES.

Honey-Extractors—Comb Honey vs. Extracted

Written for the American Bee Journal

Query 620.—1. In making an extractor for the Langstroth frame, should the frame stand on its end, or hang by the top-bar? 2. Which is the most profitable to produce, comb honey at 15 cents per pound, or extracted at 10 cents per pound?—W. S.

1. It should stand on the end. 2. Extracted.—WILL M. BARNUM.

1. Perhaps on the end. 2. I do not know. May be extracted.—C. C. MILLER.

1. Let the frames stand on their ends. 2. Extracted honey, if you have to ship to a market.—P. L. VIALON.

2. Extracted, if you can dispose of it at that price.—H. D. CUTTING.

1. It should stand on its end. 2. At those prices, the profits would be about equal.—J. P. H. BROWN.

1. On the end, as the size is less, and the extractor is cheaper. 2. For the average man, extracted; for the expert, comb honey.—A. J. COOK.

1. The frame should stand on its end—otherwise the extractor will be too large around. 2. I think that there is not much difference.—E. SECOR.

1. It should stand on the end. 2. If equally easily sold at those prices at wholesale, I should have little choice, and should allow my taste to decide.—R. L. TAYLOR.

1. Let the frame stand on its end. 2. Extracted, by all means; for the labor is less, and the yield much greater.—DADANT & SON.

1. It should stand on the end. 2. It will depend something upon the locality; ordinarily there would be little difference, I think.—MRS. L. HARRISON.

1. It should stand on its end. The honey is more easily thrown out when the frame is put in top downwards. Hanging by the top-bar is the worst position. 2. Extracted at 10 cents per pound.—M. MAHIN.

1. The Langstroth frame should stand on the end in the extractor. 2. Personally I prefer to produce comb honey at the same price as extracted, and as long as I could get 5 cents more per pound for it, I should not lose any sleep figuring on it.—J. M. SHUCK.

1. If you wire the frames, they should stand on the end. 2. Extracted honey at 10 cents per pound, for me.—J. M. HAMBAUGH.

1. It should stand on the end. 2. In some localities, comb honey, and in

others, extracted. If one could be sold as readily as the other, extracted would be the most profitable.—A. B. MASON.

1. It should stand on its end. 2. It will depend upon the season and yield, and the experience of the operator, and the demand for honey. With me, I can do better with extracted honey at 10 cents, than comb honey at 15 cents. Others can do better the other way. Try each plan, and see for yourself.—J. E. POND.

1. I do not think that it makes any difference how the frame goes into the extractor—at least I could never see that it did. 2. If each kind sells in about the same length of time in your market, one would be about as profitable as the other.—G. M. DOOLITTLE.

1. I prefer the frame to stand on its end, and to swing towards the bottom-bar of the frame; for the reason that cells incline upwards, and the honey is more easily thrown out. 2. If I could sell extracted honey readily by the keg or barrel, I think that I should say extracted. With me, however, it is very slow sale, and I prefer to produce comb honey, for which there is usually a good demand at 15 cents or more.—C. H. DIBBERN.

1. My extractor takes the frame standing on its end, and I would not have it otherwise. 2. It is most profitable to me to produce both liquid honey and honey in the comb. It would depend upon the readiness of the sale of the one or the other article. If there could be any reason why I should decide to produce all my crop in one or the other form, at the prices you mention, taking one year with another, I would risk the honey-extractor.—G. W. DEMAREE.

1. There are advantages in both ways. If you have plenty of material, ample room in your honey-house, and propose to extract a great deal of honey, then I would advise you to take the combs—well, there are advantages both ways, and I do not know which I would choose. 2. It all depends upon the color of the honey taken from your fields, the strain of bees you keep, what you know about the production of the different kinds of honey, and your market. Usually the proper answer would be, "Extracted honey."—JAMES HEDDON.

1. Usually it stands on the end, and it is just as well. 2. At the prices quoted, the profits would be about equal.—THE EDITOR.

The Date on the wrapper label of your paper indicates the end of the month to which you have paid. If that is past, please send us a dollar to carry the date another year ahead.

Swarms.—John McKeon, Dryden, N. Y., on March 2, 1889, writes thus:

A favor will be conferred if Messrs. J. E. Pond, R. L. Taylor and G. W. Demaree will please answer the following questions: 1. Is it a violation of the Sunday law of New York State, to hive swarms on Sunday? 2. Has a person a legal right to go on the premises of another to get a swarm off of a tree, or other place, if no damage is done?

By request, those mentioned in the query, have answered as follows:

1. No, it is not.

2. Consent must be obtained to go upon another's land for any purpose. Otherwise trespass is committed.—J. E. POND.

1. Works of "necessity and charity" are expressly excepted from things forbidden to be done on Sunday. To hive a swarm of bees is a necessity, as much as to take out a "beast fallen into a pit," and therefore is not a breach of the law.

2. No. If the swarm is his own, and he has followed it, keeping it in sight, he has the same right to take it that he would have to follow his horse on the land of another, and take it. To do so in either case, would be a trespass, if without license from the owner of the land, express or implied. See *Goff vs. Kilts*, 15 Wend., N. Y., Rep. 550.—R. L. TAYLOR.

2. I believe that the Sunday law of the State of New York is very nearly like that of this State (Kentucky)—all work is forbidden except "works of necessity." From my earliest memory the hiving of swarms of bees has been regarded "work of necessity" by the best men I ever knew. It is therefore not a violation of law to hive swarms of bees on Sunday.

2. According to the "common law," if you keep in sight of a swarm of bees and they "settle" on the lands of a neighbor, you may take the bees without violating the law, if you do not damage the owner of the land. But if your neighbor was at enmity with you, and should forbid you to go on his premises, you then might resort to law in an action for the possession of the bees, by what the law books call "claim and delivery," and you ought to recover them. In accordance with the principles of law, bees may be removed just like other property, if they can be certainly identified.—G. W. DEMAREE.

Simmins' Non-Swarming System, and the AMERICAN BEE JOURNAL for one year, for \$1.25. The subscription to the BEE JOURNAL may begin now.

CORRESPONDENCE.

NATURE'S WAY.

Are we Going Against Nature in Working for Comb Honey?

Written for the American Bee Journal
BY G. M. DOOLITTLE.

When I first began bee-keeping, the sections or honey-boxes were not like those of the present day, as a part of them were made to hold 15 pounds, while the smallest boxes then in use in this locality held fully 6 pounds. Some of these boxes had glass sides, while others had only a small piece of glass over an auger-hole, so that the owner of the bees could see through this glass to tell when the combs were completed, or when the honey was ready to take off; for, when these combs were sealed next to the glass, the whole of it in the box would be so, as a general rule.

In these boxes we frequently found brood and pollen, even when a hive as large as 2,300 cubic inches was used, and many wondered why the queen would go above to lay, when there was apparently plenty of room for her below. The reason for this, as I look at it, is that new comb is being built above, which is generally of the drone size of cells, where the bees have their own way in building it, which, with the desire of the queen to be where the bees are the most active, causes her to go into the surplus arrangement to lay.

Some seem to think that this trouble of brood and pollen in the surplus apartment of the hive is something that comes by our working against Nature in these latter days, caused by the contraction of the brood-chamber, which is done by many of our leading apiarists; but this is a mistaken idea, for I found more brood and pollen in my comb honey years ago, before I ever contracted a hive, than I have since, where no queen-excluding honey-board was used.

As time passed on, the thought originated in some enterprising beekeepers' head, that honey would sell better if stored in still smaller boxes than those weighing 6 pounds, so we soon had the 3-pound box. This box was used in the same way as its predecessors had been, namely, with glass sides, while it was made long enough to hold only one comb, which comb was about 2½ inches thick when completed. With this box I had very little success, for the bees seemed very loth to work in it, and when they did so, they would frequently try to put in three combs, which made it in very

poor shape for market. For this reason I decided that it was not in accord with the nature of the bees to be cut up in so little clusters, and have their combs as thick as 2½ inches. Consequently I went back to the 6-pound boxes again, leaving it to others to work the smaller ones as they pleased.

When the 2-pound sections with separators were introduced, I considered them as being still worse than those preceding them, for the bees were divided into still smaller clusters than before; at least this was my first thought. One night, while lying awake thinking on the subject, I believed that I saw a difference between this way of using small boxes and the old way, where glass was used on both sides of the box; for in using separators, the bees were not, properly speaking, divided into little clusters, but virtually had one box of the size given by the number of sections used in one tier, which was generally twice the amount of the 6-pound boxes; for as the tin did not come within ¼ of an inch of either the bottom or top of the sections, the bees and warm air could pass from one to the other just the same as if no tin was there. But there was so small an entrance that I feared this would be a hindrance to the bees coming up in the sections to work to good advantage, and in order to overcome this, I left the bottom off of all those first used, so that I might not meet with a partial failure, as I had done with the 3-pound sections or "boxes," as all such were termed at that time.

My yield of honey from colonies in these hives was greater than fall than from the other hives, which went far more toward convincing me that this plan would succeed better than anything else could; but I found that in leaving the bottom of the sections off, I had gotten into a job which I did not care to go through with again, and, beside, in using the tin separators so narrow that ¼ of an inch was left both above and below them, I had a bad job here also, for the bees built through here so that the combs were mashed in putting on the glass afterward.

Although still fearful that I might lessen the yield of honey by putting on the bottoms of the sections and widening the tin, yet I resolved to try, so the next season found me putting sections on a few hives, the same as I use them now, while the rest of the apiary was worked with the 6-pound boxes as heretofore.

At the end of that season I found that the colonies having the sections with separators, gave me the largest yield, and the combs in these sections were simply perfect; while many of those in the larger sections were far

from being so. These sections had a comb about 1½ inches thick, which thickness the bees seem to prefer for storing honey, although they can be made to use either of those thicker or thinner. The entrance to the sections also seemed ample, and by a little figuring, I soon saw that the ¼-inch space between each section was greater as a whole than the entrance given to the larger box.

When the next season came, I worked about half of my bees with sections, and the other half with the large boxes, thus using caution when starting out on something new, as I always think it advisable to do. The result of that season proved the same as that of the seasons before, so that I then adopted sections entirely, and firmly believe that such an arrangement does not inconvenience the bees in the least, over what they would be in a box of the same capacity without separators.

When the queen-excluding honey-boards came before the public, I tried them slowly, as I did the sections, using more and more with each year, till to-day I am fully prepared to say that none of these things are of any inconvenience to the bees. Only in this way can any one fully say what is good, and what is not; for the condemnation of a thing without using it, amounts to nothing. The old injunction of "prove all things, and hold fast to that which is good," is as valuable to-day as it ever was.

Borodino, N. Y.

MANAGEMENT.

Putting Bees Out of Cellars—Spring Methods.

Written for the American Bee Journal
BY MISS IDA L. SMITH.

The best time to take a retrospect of any line of action is after we have passed through it, and by our failures in the past we are able in a degree to avoid the rock upon which so many are wrecked. In apiculture, as in many other pursuits, to avoid failures many of our plans have to be laid, reaching far ahead. It is not in the management that prepares the strong colonies for the honey harvest, that an apiarist shows his skill, but in getting the weak colonies strong, and ready to go into the sections.

Apiculture is a continuous chain the year around, each part of a season depending upon the preceding, so that entering upon spring management of bees we will presume that everything has been done in the proper way, and at the right time; we will especially assume that the bees have been win-

tered in a cellar, and everything surrounding them, and the care, was such that there has been no loss of vitality other than would result from age.

In this latitude the time to carry the bees out of the cellar is usually from April 20 to May 1. In removing bees from the cellar, a time should be selected that has the appearance of several warm days together. A little ingenuity can be used in devising plans for carrying them out, that would be the least fatiguing. The work should begin as soon as the sun is sufficiently warm in the morning, for the bees to commence their cleansing flight almost as soon as they are placed on the summer stands.

The following arrangement I like: Height of the hives from the ground, not less than 4 inches; first row 6 feet apart, facing the east; the second row facing the south, and about 2 inches from the rear of the first row; the third row is 6 feet from the second, and opposite the spaces in the first and second rows (so that the morning sun will shine in the entrance), and so on.

In this climate as late as May 20 we often have cold weather sufficient to chill the brood, and entirely stop brood-rearing, for which reason spring protection of some kind ought to be used. The lumber in boot and shoe boxes answers every purpose, to make rims for the hives 18 inches deep, and 2 by 3 feet; the covers should be water-tight, and they will also answer for shade-boards in the summer if needed.

For the packing to fill in between hives and the rims, sawdust, fine hay, or chaff is very good, using small blocks to keep the entrances free.

Before packing, and after the bees have had their flight, see that they have plenty of stores to stimulate brood-rearing; those that have not, mark it in a record-book, to be fed, and if any are found queenless, unite them with a colony having a queen. It is well to leave the packing on until the time to put the cases on.

Now is the time to get the hives ready for the summer. The cases, sections, foundation, separators, smoker, and the swarming-box, should all be in readiness when the honey harvest begins; and last, but not least, the bee-veil should have attention.

Every apiarist should rear queens to have them ready for the swarming season, as no apiarist can afford to have a colony queenless during the honey-flow.

See that your bees have water, if you are not near a river or small stream.

My tools consist of a long screw-driver, a large knife, and a scraper.

Darlington, Wis.

COMB HONEY.

Some Practical Thoughts on Its Production.

Read at the Maine Convention
BY L. F. ABBOTT.

Given a certain number of strong colonies of bees in the spring, how shall they be worked to produce the largest amount of comb honey? This question is not so easily answered as it might at first seem to be; but ordinarily I believe it profitable—the honey-flow of course being good—to let one swarm issue, allowing the parent colony to rear a queen, destroying all but one of the queen-cells about the fifth day after the swarm issues. Previous to swarming, however, when seven or eight frames are well filled with brood, and the bees seem disposed to build bits of comb in all available spaces, the time has come to put on surplus cases.

Now we will say that five colonies are each in seven frames, and ready to receive sections for the storing of surplus honey. The season is now advanced, and weather warm, so the brood we have to take from the hives to reduce the brood-nest will not suffer from exposure. Each hive is opened and reduced to six frames, leaving the best filled with brood and eggs. Those frames taken out may be placed in a hive with a portion of young bees adhering to the combs, and form a new colony. At the expiration of a couple of days, a laying queen may be given this colony—ordinarily she might be introduced at once—which will be ready in three or four weeks, or so, for a section-case, and will send off, probably, a young swarm, which should be made to stay at home, or equivalent to that, of which I will have more to say about subsequently.

Shaving the Combs.

The old hives now have six frames which should be carefully shaved, over the portion containing honey, to $\frac{1}{2}$ of an inch, and spaced in the hives to bee-space— $\frac{1}{4}$ of an inch. If the frames are fixed with reversible attachments—as I would have them—reverse the frames and use a dummy on each side so the surplus case will fit without leaving any open space.

Twenty-four or twenty-eight one-pound sections supplied with thin foundation are enough, and perhaps if half the number could be so arranged to place on at first, it would be better than the larger number. After these sections are all filled with comb, and two-thirds of the upper portion capped over, this case may be raised, and another case of the same size placed

upon the brood-frames. A wide frame containing eight sections might be placed each side of the brood-frames,—after removing the dummies—but I should expect that they would be immediately filled with eggs by the queen.

If the honey-flow is copious, our five colonies will each send out a swarm by June 10. Hive them upon empty combs or sheets of foundation, and, if preferred, the new colony formed by frames of brood taken in reducing the old colonies to six frames when putting on the section-cases, may be drawn upon to the extent of a frame for each new swarm, replacing the frame so taken by an empty comb or foundation, which the laying queen will quickly occupy.

Restrict each colony to sending off one new swarm, and these new ones not to be allowed to swarm at all. Such first swarms will probably swarm in about four weeks. Let the swarm issue, hive in the ordinary way, place on a new stand a little distance from the former stand, and put the frames from the parent colony, bees and all, into the new hive, in the new location; place on the surplus case, and things will be likely to go on through the season without more trouble by swarming. If they do swarm out again, after a couple of weeks, put them over again, and keep them to work in surplus room.

The old colony, having all queen-cells but one removed, five to eight days after sending off, the swarm will very likely swarm again, in three or four weeks, when they, too, should be changed over as described for the others.

Objections may be raised to this plan, on the ground that if one has a large number of colonies, it is undesirable to increase as fast as this method contemplates.

In rebuttal it may be urged that, as a rule, the old colony and one new swarm issuing from it—all things being favorable—will store more honey than the old colony alone, prevented from swarming. Again, the method I have given somewhat in detail, contemplates putting only strong colonies into winter quarters. Reduce the number of colonies by doubling up at the end of the honey harvest; make sales of colonies according to value, reserving the best for yourself, as you would select your sheep and lambs, keeping the best yourself, and turning the inferior ones to the butcher at what they will bring.

But this course of allowing the old colonies to cast a swarm need not be followed, if one is satisfied with the product of that. By running over the

combs and changing to new locations two or three times, the increase probably would be largely checked, if not entirely prevented.

Increase of Colonies.

If one has but a small number of colonies, and wishes to increase as fast as possible, and yet get as large amount of surplus comb honey as possible, I know of no better plan than the following:

We will say the apiarist has four colonies; by the methods I have given, encourage breeding in the spring, and when the time arrives for putting on surplus cases, contract the brood-apartment to five or six frames, shaking off nearly all the bees from the frames removed, and place them in a hive with a laying queen. Shave all brood-combs to $\frac{1}{4}$ -inch, and space them to $\frac{1}{2}$ of an inch. When the old colonies send off new swarms, capture the old queen and return them to their respective hives, supplying their places in the new colony with young, laying queens, which can be introduced at this time without much danger. Remove all queen-cells from the old colony, to prevent after-swarms, and let brood-rearing proceed. By this method, in a good honey-flow, colonies may be increased very fast, and a good amount of surplus honey be obtained.

The plan of shaving the combs to $\frac{1}{4}$ -inch thickness, and spacing the frames to a bee-space, I believe to be of considerable importance. The idea was not original with me, but as far as I know, to Mr. E. P. Churchill belongs the honor of first giving this method to the bee-keeping world.

Using the Extractor.

Can the extractor be used to advantage in running an apiary for comb honey, by extracting from the brood-frames when putting on the surplus cases? This is a question I am not fully prepared to answer either way, and certainly not in the negative. I have used the extractor in that way, and thereby secured a good amount of honey, but it is generally a mixture of fruit-bloom and clover honey, neither one nor the other.

On the whole, I am not sure but as good results will be obtained by letting the honey remain in the combs, when manipulating the hives for the surplus cases. The theory is, that in shaving and spacing the combs and reversing them, the bees will carry the honey from the brood-frames and deposit it in the sections. I am inclined to think that this is generally true. Then if one cares for sameness in quality of his comb honey, it is better to extract the mixed honey, and secure the virgin article from the clover bloom.

Lewiston, Maine.

BEE-CELLAR.

Wintering Bees in the Cellar—Experience.

Written for the American Bee Journal
BY A. D. LORD.

I am located two miles from any timber land, having commenced in the spring of 1887 with 3 colonies, and increased them to 7, which I wintered in the cellar under the house. There was plenty of bees in the spring, but some of the colonies dwindled to a mere handful, and I only saved them by buying a few by the pound and giving some to each colony. They were slow in building up, but increased again in 1888 to 18 colonies, and I took 250 pounds of comb honey.

I put in the bees on Nov. 8, and each colony was weighed, so that I might know just the amount of honey that it takes to winter them. They have lost in weight up to the present time (Feb. 26) from $2\frac{1}{2}$ to 4 pounds each.

I will endeavor to give a description of my bee-cellar:

I commenced by digging 5 feet into the ground, then setting up studding 7 feet high, and ceiling it all around as tight as lumber could make it. It has two doors to pass in and out, and it is 8x12 feet, with a ventilator at each end.

Before putting the bees in, I took a section of the hive, and putting a piece of cotton cloth over the bottom and filling it about 3 inches deep with oats, to absorb the moisture, which, I think, has done well, for the bees are perfectly dry all the time. The temperature has been from 34° to 40°, and they seem to be perfectly quiet all the time.

I have carefully scraped up all the dead bees, and they weigh $1\frac{1}{2}$ pounds at the present time.

Aniret, Minn.

FEEDING BEES.

What and How to Feed During a Mild Winter.

Written for the Prairie Farmer
BY MRS. L. HARRISON.

Bees during a mild winter, like the present, consume more honey than in a cold one. When they are often upon the wing exercising, they require more food than during a cold winter when they are in a semi-dormant state. Bees store their pollen or bee-bread in the base of the cells, and fill up with honey. When they have consumed the honey, they will rear brood in the center of the cluster, the nurse-bees eating the bread so as to give milk to the young, or, in other words, feeding

it to the young half-digested, as the pigeons feed their young. These little patches of brood in the center of the cluster are a wise provision of nature against the loss of the queen, for as long as they have eggs or larvae not over three days old, they can rear another queen or mother bee.

As the drain upon the bees' stores has been excessive, owing to the mild weather and consequent activity of the bees, the owners of colonies, whether few or many, should not let them starve. If he does, he loses not only the bees, but all the honey they had in the fall. Bees consume their stores very rapidly in the spring while rearing their young, for scientists tell us that insects during their larval state consume more food than during the remainder of their lives.

Honey as Food for Bees.

Honey is their natural food, and nothing else is to be resorted to when it is to be had. Large apiaries usually have in store dark honey that is not salable, and broken or partly-filled comb, which can be utilized in this way. I have a few two-pound sections, in which the queen laid and drones were reared, discoloring them, rendering them unfit for food, and these I shall use as feed for bees, turning them down over the cluster.

I do not advise feeding bees in early spring, except to prevent starvation, for it arouses them to activity, and they will try to rear more brood than they can cover; and let the weather turn suddenly cold, contracting the cluster, much of it will perish. More young queens will be reared by feeding, but it will be at the risk of the lives of the old bees, for it is a severe draught on their vitality, preparing their food; they also fly out for water on chilly days and perish. When a bee loads up with cold water it gets numb, and cannot return home. If the old bees die off faster than the young ones are able to take their places, the colony must ultimately perish.

Making the "Good" Candy.

This candy was the invention of a prominent bee-keeper, whose name it bears, and is made as follows:

Heat liquid honey until hot, but not up to the boiling-point, and stir in confectioners' sugar until it will absorb no more, when it can be made into cakes with the hands. This candy will not be sticky, yet keeps soft and moist, so that bees can feed from it.

A cake of this candy could be slipped down into the cluster and save a colony from starvation, and yet not arouse them to undue activity, as the feeding of liquid honey or syrup would do.

The Feeding of Syrup to Bees.

This should be used only as a forlorn hope, when the bees' natural food is not to be had, for a laborer is worthy of his hire, whether a bee or a human being. It is not particular what kind of sugar is used for making syrup in the spring, when the bees can fly every few days; but, in the fall, nothing but the very choicest will answer.

I generally pour boiling water upon the sugar in a pitcher, and stir it up with a spoon, making a thin syrup, which I feed warm. The undissolved sugar will settle in the bottom, and it should be allowed to settle, for it will harden in the feeders, and become bothersome.

Feeders and Robbing.

I have many different kinds, and use them according to time, place and condition. If I desire to feed liquid honey or syrup when it is cool weather, and am desirous of keeping all the warmth possible in the cluster, a one-pint Mason jar, with a perforated cover, answers the purpose admirably, as it can be turned over a small hole, and the bees take it through the perforations. I have tried the quart jars in the same way, but the result was not satisfactory in my hands, for the syrup came down faster than the bees could take it, and it would run from the hive and be wasted. It needs to be set perfectly level, and then it will not run out.

Wooden vessels answer the purpose much better for feeders than those having a smooth surface, like tin, glass or earthen-ware. If a tin or glass vessel should be filled with liquid honey or syrup, and be accessible to bees, in a very short time they would be a writhing, struggling, drowning mass; while, if the same quantity were in a wooden vessel, every bee would get out.

Bees appear to be able to take a grip on wood, which they cannot do on other surfaces. Small wooden-bowls, or butter-dishes, if they do not leak, make good feeders. I once showed to a bee-keeper a feeder that was cut out of wood, by a wabbling saw. He said that it would get full of drowning bees. He was mistaken, however, for I filled it immediately with syrup, put it over a strong colony, and in a very short time it was clean and dry without a dead bee. Any sort of a vessel can be used, if it is filled with chopped straw or shavings.

In all feeding operations, care must be exercised lest robbing be induced. When food is placed in the upper story of a hive, if bees from the outside can gain admittance, the colony will soon be taken by storm, and stores stolen.

DIVIDING**Colonies to Secure Increase Explained.**

Written for the American Bee Journal
BY J. M. HICKS.

In compliance with a promise made to the members of our Indiana State Bee-Keepers' Society, I will give my favorite method of dividing colonies for judicious increase and profit. This, of course, depends much upon the condition of the colony, which should be full of brood and worker bees, as if they were to be left to swarm in the old or natural way. This condition can readily be known in several ways, viz:

First, we usually find them quite well supplied with drones, which come out to play late in the afternoon.

Second, we can also know, by opening a hive that is full of bees and brood, with a good, prolific queen, actively laying eggs in the brood-frames; also quite a number of drone-cells may be found sealed over in the combs, all of which are requisite for the welfare of the future of the new colony.

We can now examine the frames of brood, and when we find the sheet or frame on which the queen is busy laying eggs, lift it carefully out, and hang it in a new hive of the same size and pattern, replacing the vacant space in the full colony with a new frame, and if filled with good empty comb, so much the better.

Now close up both hives, and move the old colony to a new location; then place the new hive with the one frame of brood and queen where the old hive stood, and you will have the satisfaction of seeing the working-force return to the new hive, and with their queen, where all will be peace and harmony, and in less than 48 hours a fine, strong colony of bees can be seen working with a will.

From the old colony made queenless (in order to make the "artificial" swarm, as above mentioned), at the end of 8 or 9 days we can with safety cut out several queen-cells and insert one or more in any other colony or colonies that may be queenless; or, if desirable, other new colonies can then be made by taking a frame or two from strong colonies, and thus requeen all new or "artificial" swarms, saving much valuable time. Always leave one or two queen-cells in the old colony, that they may hatch and rear a queen for themselves.

I would further add, that it will be better by far to save all of the best empty or old combs in order to refill empty or new frames for the bees, thus

saving much precious time for the bees, as well as many pounds of the best honey, which is always gathered in the forepart of the season. Look well to the bees!

Indianapolis, Ind.

BEE-CULTURE**Considered as a Branch of Agriculture.**

Read at the Illinois Farmers' Institute
BY G. A. GROSS.

There is probably no branch of farming so generally neglected and so little understood as that of bee-keeping. If it cannot be said of every farmer, that he can keep bees successfully, still there are many that with a little intelligent care could cause their bees to make a welcome addition to their income.

It is not an occupation that is restricted to men only—many a farmer's wife or daughter would find it a fascinating pursuit, as well as an easy way of being independent of "father's pocket-book;" for the work is not hard, nor does it demand one's whole time. One daily visit to the hives, taking only a few minutes, a little extra watching at swarming time, the putting on and taking off of sections—this certainly is not work that will overtax a woman's strength. All over our land are found women who rank among the most successful apiarists.

I have frequently heard the remark, that this is not a good country for bees, and until six years ago I would have heartily endorsed that opinion, for I had kept bees for 18 years, and never had much success with them. Finally I lost my last colony, and came very nearly giving up the pursuit. But at that time I read an article about the modern improvements in bee-keeping, became interested again, sent for a book describing the new way of handling bees, bought one hive, and started anew, trying to take the best care of the bees. As a result, at the end of four years I had 70 colonies, had sold considerable honey, and two years' more work with the bees, has confirmed me in the opinion that our country is as good a place to keep bees as any in the United States, with the exception of California.

With our variety of flowers, coming as they do at intervals during the summer, we possess a great advantage over the northern part of our country which is celebrated for its large yields of honey.

In this county (Bond), up to Aug. 10, 1888, the season had been the poorest on record—no swarms and no

honey, was the general complaint. I do not think that my 57 hives contained more than 25 pounds of honey, and I had the prospect of feeding all my bees, but heart's-ease came to the rescue, giving us the best honey-flow I ever saw. In the five weeks that it lasted, my bees gathered over 3,000 pounds of honey. See what a loss it would have been, but for the bees. I have no doubt that for the lack of bees to gather the honey, our county suffers a loss that annually counts up in the thousands of dollars.

But there is still another reason for keeping bees, that should have a great weight with farmers—I mean the very important part which bees bear in the economy of nature in fertilizing flowers, and thus increasing the crop of fruits of every kind.

Having seen a few of the reasons why farmers should keep bees, let us consider what the bee-keeper needs to enable him to reach the best results.

First, he must understand something of the nature of bees, how they live, how they work, what variety is best to use, etc. A colony in its normal state consists of one queen, or mother-bee, several thousand workers, varying from 6,000 to 40,000, and a few hundred drones, or male bees; these last being present only at certain times of the year.

The queen is the only perfect female bee in the hive. She can easily be recognized by her size, for she is about twice as long as a worker-bee. Upon her depends the prosperity of the colony, for she is the only one that lays the eggs. Take the queen away, and the colony is doomed, unless the bees have eggs from which to rear another one.

A good queen will lay from 2,000 to 4,000 eggs a day, being more or less prolific, according to the flow of honey. The life of a queen is much longer than that of the workers, for while she lives from two to four years, a worker-bee will not, on an average, live longer than six or seven weeks; though in winter their life is prolonged from five to six months.

The drones are known by their short, thick bodies, and loud buzzing when on the wing. Their life is of very uncertain duration, lasting from a few days to a few weeks at the longest.

Italian and Black Bees.

We need only consider two varieties of bees, the common black bee, and the Italian; of these two races the latter are generally preferred. They are of more pacific disposition, and besides their good moral character, they are more industrious, working earlier in the morning, later in the evening,

and on days when the black bees would find it too cold to leave their hive.

The tongues of the Italian bees are also longer, enabling them to get honey from flowers that the common bee has to pass by; and finally, their queens are more prolific.

Of the different kinds of hives used by progressive bee-keepers, all without exception have the one feature of a double story. These two stories—the brood-frames below, the cases with sections above, with the honey-board between the two, are the main features necessary for the successful production of comb honey.

How to Avoid Stings.

The handling of bees is easy to any one who is not afraid of stings; but these can be avoided, to a great extent, by the use of a veil and smoker, and by observing the following precautions:

Never go between the hives in a hurry, nor walk in front of the entrances so as to disturb the bees in their passing in and out; avoid all quick motions, all jars of the hive, and when you have any work that will necessitate the opening of a hive, always choose a time when the bees are out at work, smoking first the guards at the entrance, then, after taking off the cover, sending a few puffs of smoke among the frames, after which you can go to work with impunity. Finally, if a bee should come buzzing about you, keep perfectly still, close your eyes, avoid breathing on it, and it will soon leave.

In writing the foregoing, it has been my aim to call the attention of the farmers to a field that has been too much neglected. In this pursuit, as in all others, to him who would succeed, four conditions are necessary, viz: He must understand it; he must love it; he must believe in it, and, last but not least, he must stick to it.

Greenville, Ills.

Convention Notices.

There will be a meeting of the Susquehanna County Bee-Keepers' Association at the Court House in Montrose, Pa., on Saturday, May 4, 1889, at 10 a. m. H. M. SEELEY, Sec.

The Des Moines County, Iowa, Bee-Keepers' Association will hold its annual convention in the Court House at Burlington, on April 23, 1889, at 10 a. m. All bee-keepers are invited. JOHN NAU, Sec.

The 11th annual session of the Texas State Bee-Keepers' Association will be held in the apiary of W. R. Graham, of Greenville, Hunt Co., Tex., on May 1 and 2, 1889. All bee-keepers are invited. The last meeting was held here last May, and was the best ever held. So we look forward to a good time next May. A cordial welcome and hospitality will be tendered to all who come. G. A. WILSON, Sec.

Please to get your Neighbor, who keeps bees, to also take the AMERICAN BEE JOURNAL. It is now so CHEAP that no one can afford to do without it.

CONVENTION DIRECTORY.

1889. Time and Place of Meeting.
Mar. 30.—Agency, at Agency, Mo.
T. S. Smith, Sec., Agency, Mo.
Apr. 23.—Des Moines County, at Burlington, Iowa.
John Nau, Sec., Middletown, Iowa.
May 1, 2.—Texas State, at Greenville, Tex.
G. A. Wilson, Sec., McKinney, Tex.
May 4.—Susquehanna County, at Montrose, Pa.
H. M. Seeley, Sec., Harford, Pa.
May 21.—Northern Illinois, at Pecatonica, Ill.
D. A. Fuller, Sec., Cherry Valley, Ills.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER BOX

Bees in Fine Condition.—T. F. Bingham, Abronia, Mich., on March 6, 1889, says:

Bees have had a series of fine sports on the wing within the past week, and are in first-class condition. Those in the cellar are in excellent condition, and as quiet as if asleep.

Good Prospects for Clovers.—Wm. G. Cory, Cason, Ind., on March 6, 1889, says:

Bees in this locality are doing well, only a few colonies having died from want of stores. I use the Armstrong Crown hive, packed with dry forest leaves, and my bees winter well on the summer stands. The prospect is good for all kinds of clover. The AMERICAN BEE JOURNAL is a welcome visitor.

Foul Brood.—A. L. Leach, Livingston Co., Ills., on March 1, writes:

My bees are in unusually good condition at the present time. I have no loss to report for this winter. The reports of individuals and conventions indicate that foul brood prevailed to an alarming extent during 1888, and three associations passed resolutions invoking Legislative aid. To me this is very absurd. I would as soon think of legislating to control the weather, which, no doubt, causes it to come and go. I have had two years' experience with foul brood, and lost 15 colonies in the early part of the winter of 1887. Last spring I purchased 10 healthy colonies, and used the diseased combs, increasing the 10 to 22. My other colonies were affected with foul brood from the previous year, and of course they all became affected. I devoted three months with various experiments in which the popular impressions of the disease had but little show; prob-

ably very many will doubt it when I say, that I can cure it with little labor and small loss, and it is not right to burn or destroy affected colonies, as it is only moderately contagious, and not liable to be carried from one place to another.

Yes; we doubt it, but are quite ready to learn the *modus operandi*, and have it thoroughly tested. But here is something later from Mr. Leach:

LATER.—Since making the above statement in regard to foul brood, I have read Mr. Baldwin's article on page 134, a part of which corroborates my experience, which has been thorough and conclusive, and which I can demonstrate to a certainty. I would have written very differently, if I had read Mr. Baldwin's article first. It was my intention to publish a full course of treatment after getting comments on my statement. My experience with bees and queens that are affected, also with old combs, is thorough and comprehensive.

Bees Wintering Well.—R. A. Rummel, Butler, Ind., on March 9, 1889, writes:

My bees are wintering well, except late swarms that did not gather enough honey to winter on. There was not much surplus honey gathered here last year, but the brood-chambers were well filled with golden-rod honey. The forepart of this week was warm, and the bees were out thick, visiting sugar orchards, but it is cold again now.

Reading Bee-Papers, etc.—D. R. Rosebrough, Casey, Ills., writes:

The white clover in this vicinity looked well last fall, and I still hope that it will not be killed; yet the weather is very hard on it at present, as we have had our coldest this month (February). What do we learn from the AMERICAN BEE JOURNAL besides bee-culture? 1. It keeps us informed as to the weather, not only in Illinois, but throughout the United States, all Europe, and Canada. 2. It tells us of the condition of the crops of the country, and the state of the health of the people. It acquaints us with hundreds of persons whom we would never know. It is a common occurrence for a man to call at my office, and speak to me as though he was a brother, and tell me it was in the BEE JOURNAL that he first saw my name. 3. It tells us the price of honey all over the country, and which of the two races of bees is the strongest—the blacks or yellow

bees. The country and woods were full of bees when the yellow race was imported, and in my neighborhood, 12 years ago, when an Italian queen was first brought to this (Clark) county, her grand daughters would be black bees every time; but now that is not the case, as every bee-yard in this neighborhood has the yellow bees. Persons living five miles from Casey, who never saw a queen, have at least half yellow bees. I think that the black bees are fast disappearing, and that within another 12 years black bees cannot be found here. My bees are wintering nicely. The last summer thinned bees out in this county—the old farmers say that the moths killed them.

Warm Winter Weather, etc.—J. L. Gray, St. Cloud, Minn., on March 9, 1889, says:

My crop last year from 50 colonies in the spring, was 3,080 pounds, 2,000 pounds of comb honey, and one-fourth increase of colonies. I have 75 colonies in the cellar, but the exceedingly warm weather from Feb. 27 to March 7, taxed my ability to keep them quiet, but I succeeded very well with ice, and open doors at night.

Good Season Expected.—W. A. Hodge, Victory, Wis., on March 10, 1889, writes:

I commenced the spring of 1888 with 24 colonies of bees, mostly Italians, and I have now in the cellar 43 strong colonies, after selling 8 colonies last fall, besides in swarming time 3 swarms went to the woods. My honey crop for the past season was about as follows: One thousand one-pound sections of honey, 250 1½-pound sections, and about 200 pounds of comb honey in the old-fashioned boxes. I sold it at an average of 11 cents per pound, and I am well satisfied with the result; but I expect much better results the coming year.

Apple Bloom—White Clover.—Wm. Malone, Newbern, Iowa, writes as follows:

The winter of 1880-81 killed nearly all the bees in this county, and the winter of 1884-85 left none in box-hives and "log gums." Four neighbors living from 2 to 6 miles west of here, had large orchards, and each had from 10 to 25 colonies of bees in box-hives. The winter of 1884-85 destroyed all their bees, and the next season they had no apples. I wintered 5 colonies out of 38 that winter on the

summer stands. A Mr. Crane, 1½ miles east of here, wintered 20 colonies in the cellar, and my western neighbors went to Mr. Crane for apples the following fall, as Mr. C. and his immediate neighbors had plenty of apples. When bees can work on apple-bloom, there will be plenty of fruit.

I cannot tell the exact condition of the white clover yet, but I think that it is winter-killed badly. The ground is frozen hard about 2 feet deep, is bare, and has been so nearly all winter. Bees are wintering tolerably well. I have 52 colonies in the cellar or cave, and 12 on the summer stands; the latter have consumed but little honey yet, and have had a flight about every week all winter.

Bees had a Grand Flight.—Mr. Jacob Oswalt, Maximo, O., on March 4, 1889, writes:

For the past two years the honey yield in eastern Ohio has not been more than one-fourth of a crop, and the quality of the honey was none of the best. I am wintering my bees on the summer stands in the Falcon chaff hive; they are all going to "pull through" the winter nicely. They had a grand flight to-day—I suppose they wanted to take part in the grand Inauguration Ball going on at Washington, D. C. Bee-keepers in eastern Ohio, at this writing, are not very well supplied with bee-fixtures, and if the coming summer should prove to be a good one for bees and honey, many of our bee-keepers will be caught napping.

Bee-Keeping for Pleasure.—George Hodges, Belmont, N. Y., on Feb. 25, 1889, writes:

I have noticed in the BEE JOURNAL that some one mentioned the "blood of bees" as we would speak of cattle. I have never seen any blood in bees. I have only 4 colonies, but I never keep them for profit, as I have never obtained anything except plenty of honey for my own use. I did not get a swarm last year. I think 2 swarms came out one day, and both went together, and not being at home at the time, they went to the woods, so I did not get any swarms. I often think that I will try something different with my bees, as I see so much in the BEE JOURNAL of profit in bees, but I do not get it myself. There are a great many bees kept in Belmont, but their keepers do not read bee-literature.

We will Present a Pocket Dictionary for two subscribers with \$2.00. It is always useful to have a dictionary at hand to decide the spelling of words, and their meaning.

Experience as a Teacher.—Mr. Christian Weckesser, Marshallville, O., on March 1, 1889, writes thus about publishing new papers :

I noticed in a recent issue of the AMERICAN BEE JOURNAL an "obituary" of *Rural Life*, a paper which I published a year. It may be proper to say that, to many persons it may seem desirable to publish a periodical, while the disadvantages and undesirable features of such an enterprise are not apparent until the papers are "on their way," when, becoming manifest, they are not properly conducted, the matter they contain may become of little utility, and finally become filled with matter that is considerably worse than useless, or misleading in some direction; and not being profitable, great offers and inducements are given to secure subscribers, with which a paper that is carefully edited may not be able to compete, and be profitable to the publisher. Again, an amateur printer may think that the necessary expense a trifling matter. After making trial of this, I confess I am wiser, and though I have little of a pecuniary compensation for a year's hard labor, I feel well paid with experience. The transaction was honorable; the paper was not poorly conducted—and it would probably be a credit for more publishers to have their papers consolidated, rather than to "eke out a miserable existence."

Commend Us to the Arab.

A couple of Americans meet, grab each other's hands, and you wonder how much water they have contracted to pump in five minutes. An Englishman meets a friend and they pound each other on the shoulder, while you look on nervously, wondering who will draw first blood. Frenchmen meet, and they fall to kissing each other, while you go off in a corner and feel sick. Italians fall into convulsions, while you are hunting for the doctor. The Portuguese hook their chins over each other's shoulders, as if they wanted to find which pocket holds the handkerchief, while Spaniards hug each other with tears streaming down their faces, leaving you in doubt as to who has died; but the Arab, when he meets his friend, advances toward him, they join hands in firm pressure for just a moment, and then, without a grimace or movement of the lips, raise their own hand and touch it to their lips, saying afterward: "Welcome sight." The whole thing is done with dignity that is thoroughly manly, and yet with a hint of tenderness that is nothing less than beautiful.—*Boston Transcript*.



ALFRED H. NEWMAN,
BUSINESS MANAGER.

Business Notices.

Don't Fail to Read A. J. King's advertisement on page 190.

If You Live near one post-office and get your mail at another, be sure to give the address that we have on our list.

Give a Copy of "Honey as Food and Medicine" to every one who buys a package of honey. It will sell lots of it.

Dr. Miller's Book, "A Year Among the Bees," and the AMERICAN BEE JOURNAL for one year—we send both for \$1.50.

If you Lose Money by carelessly enclosing it in a letter, it is without excuse, when a Money Order, which is perfectly safe, costs but 5 cents.

New Subscribers can obtain the full numbers for 1888 and 1889 for \$1.80, if application be made at once, before all the sets of 1888 are gone.

Paper Boxes—to hold a section of honey for retail dealers. We have two sizes on hand to carry sections $4\frac{1}{2} \times 4\frac{1}{2}$ and $5\frac{1}{2} \times 5\frac{1}{2}$. Price, \$1.00 per 100, or \$8.50 per 1,000.

Preserve Your Papers for future reference. If you have no **BINDER** we will mail you one for 60 cents; or you can have one **FREE**, if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

Please write American Bee Journal on the envelope when writing to this office. Several of our letters have already gone to another firm (a commission house), causing vexatious delay and trouble.

Honey.—We have for sale a quantity of Extracted Honey in kegs holding about 230 pounds each, which we are selling, free on board the cars, at 8 cents per pound for Amber and 9 cents per pound for White.

In order to pay you for getting new subscribers to send with your renewal, we make you this offer. For each yearly subscriber, with \$1.00, you may order 25 cents worth of any books or supplies that we have for sale—as a premium.

A Home Market for honey can be made by judiciously distributing the pamphlets, "Honey as Food and Medicine." Such will create a demand in any locality at remunerative prices. See list on the second page of this paper.

Honey and Beeswax Market.

SAN FRANCISCO.

HONEY.—We quote: Extracted, white, 6½¢; 7¢; amber, 5½¢; 6¢. Comb, white 1-lb., 13¢; 14¢; 2-lbs., 10¢; 12¢. Demand for extracted is good; for comb, limited. Prospects are not as good for honey as in 1888.

BEESWAX.—Scarce, at 18¢; 22¢.
Mar. 15. SCHACHT, LEMCKE & STEINER,
16 & 18 Drumm St.

SAN FRANCISCO.

HONEY.—White comb, 10¢; 11¢; dark, 6½¢; 8¢. White extracted, 6½¢; light amber, 5½¢; 6¢; dark amber, 4½¢; 5½¢.

BEESWAX.—18¢; 22¢.
Jan. 25. O. B. SMITH & CO., 423 Front St.

BOSTON.

HONEY.—We quote: Best white clover 1-pounds, 16¢; 2-lbs., 16¢; 18¢. Market is very strong and stock of white comb honey is very light.

Mar. 9. BLAKE & RIPLEY, 57 Chatham Street.

DETROIT.

HONEY.—Best white 1-lbs., 16¢; 17¢. Sales slow. Extracted, 9¢; 10¢.

BEESWAX.—22¢; 23¢.
Feb. 11. M. H. HUNT, Bell Branch, Mich.

CHICAGO.

HONEY.—We quote: White clover 1-lbs., 16¢; 17¢; 2-lbs., 14¢; 15¢. Good dark 1-lbs., 13¢; 14¢; 2-lbs., 12¢; 13¢. Buckwheat 1-lbs., 13¢; 14¢; 2-lbs., 11¢; 12¢. Extracted, 6½¢; 7¢, depending upon quality and style of package. Market dull and stock sells slowly.

BEESWAX.—22¢.
Jan. 24. S. T. FISH & CO., 189 S. Water St.

ST. LOUIS.

HONEY.—Choice white clover comb, 13¢; 15¢; fair 11¢; 12¢; dark, 8¢; 10¢. Extracted, dark, in barrels, 5¢; 5½¢; choice, 5½¢; 6¢; in cans, 6¢; 7¢. Market is quiet but steady.

BEESWAX.—20¢; for prime.
Jan. 17. D. G. TUTT & CO., Commercial St.

CHICAGO.

HONEY.—Best 1-lbs., 17¢; 18¢. Extracted, 7¢; 9¢. for best quality, according to body, flavor and style of package. Trade is limited to local consumption. Off grades of comb honey are slow at lower figures than given above. But few will buy dark comb.

BEESWAX.—22¢.
Jan. 17. R. A. BURNETT,
161 South Water St.

MILWAUKEE.

HONEY.—We quote: Fancy white 1-lbs., 17¢; 18¢; 2-lbs., 15¢; 16¢. Good dark 1-lbs., 15¢; 16¢; 2-lbs., 14¢; 15¢; fair 1-lbs., 12¢; 14¢. Extracted, white, in kegs and ½-barrels, 8¢; 9¢; amber in same, 7¢; 8¢; in pails and tin, white, 9¢; 10¢; in barrels and ½-barrels, dark, 5¢; 6¢. Market dull. The very best sells slowly, and inferior qualities are neglected very much. Damaged, broken and leaky comb honey not wanted.

BEESWAX.—22¢; 23¢.
Jan. 10. A. V. BISHOP, 142 W. Water St.

CINCINNATI.

HONEY.—We quote extracted at 5¢; 6¢. per lb. Best white comb honey, 12¢; 15¢. Demand is better for dark extracted, which is scarce.

BEESWAX.—Demand is good—20¢; 22¢. per lb. for good to choice yellow, on arrival.
Mar. 11. C. F. MUTH & SON, Freeman & Central Av.

KANSAS CITY.

HONEY.—White 1-lbs., 16¢; fall, 14¢; California 1-lbs., 18¢; white 2-lbs., 14¢; extra 2-lbs., 13¢. Extracted, white California, 8¢; amber, 7¢. Market dull.

BEESWAX.—20¢; 22¢.
Jan. 22. CLEMONS, CLOON & CO., cor 4th & Walnut

KANSAS CITY.

HONEY.—Choice 1-pounds, 15¢; 16¢; dark 1-lbs., 12¢; 2-lbs., 14¢; dark, 11¢. White extracted in 60-lb. cans, 8¢; amber, 7¢; in barrels and kegs, 5¢; 8¢. Demand good, prices steady, and stock large.

BEESWAX.—None in market.
Jan. 4. HAMBLIN & BEARSS, 514 Walnut St.

DENVER.

HONEY.—White, in 1-lb. sections, 15¢; 16¢. Extracted, 9¢; 10¢.

BEESWAX.—20¢.
Jan. 1. J. M. CLARK & CO., 1409 Fifteenth St.

NEW YORK.

HONEY.—We quote: Fancy white 1-lbs., 14¢; 15¢; 2-lbs., 12¢. Fair white 1-lbs., 14¢; 15¢; 2-lbs., 10¢; 11¢. Buckwheat 1-lbs., 10¢; 11¢; 2-lbs., 9¢; 10¢. Extracted, white, 7¢; 8¢; dark buckwheat, 6¢; 7¢. which is in good demand. Market dull, except for extracted buckwheat; for all other kinds it is quiet, owing to unseasonable weather, we believe.

HILDRETH BROS. & SEGELEN,
Jan. 10. 28 & 30 W. Broadway, near Duane St.

Your Full Address, plainly written, is very essential in order to avoid mistakes.

Good Enough.—Andrews & Lockhart, of Patten's Mills, N. Y., on Feb. 20, 1889, wrote as follows concerning their use of the advertising columns of the AMERICAN BEE JOURNAL:

We got more orders from our advertisement in the AMERICAN BEE JOURNAL than from all the other bee-papers put together.

Advertisements.

HARD-TIME PRICES. 25 pkt. collection of Garden Seeds, your selection from our list, post-paid, 50c. List free. J. G. Kreider, Milton Grove, Pa. 12A3t

Mention the American Bee Journal.

BRIGHT ITALIAN Bees and Queens, Bee-Hives, Sections, Foundation, etc. 12A1y **H. H. RUETER,** Baxter Springs, Kan. Mention the American Bee Journal.

BEES FOR SALE,

IN 8 or 10 frame Langstroth Hives. For prices, apply to **PAUL SCHRURING,** 12A1t WEST DEPERE, Brown Co., WIS. Mention the American Bee Journal.

NEW YORK CITY

COMB FOUNDATION FACTORY!

NATURAL-BOTTOM FOUNDATION, good and cheap as the best. All Bee-Supplies, same characteristics. Price-List, &c. FREE. Address, **A. J. KING,** 12A1t 51 Barclay St., NEW YORK, N. Y. Mention the American Bee Journal.

ALBINO and ITALIAN QUEENS.

THOSE desiring to secure pure **ALBINO QUEENS**, will best accomplish their object by purchasing of the Original Producer of this valuable and beautiful race of Bees. For Circulars, address, **D. A. PIKE,** 12C3t SMITHSBURG, Wash. Co., MD. Mention the American Bee Journal.

APIARIAN SUPPLIES.

DR. TINKER

Offers for 1889, a superior line of supplies. His **WHITE POPLAR SECTIONS,** and **Perforated Zinc,** are still in the lead for perfect work. His **Two-Rowed Zinc Strips** for the Wood-Zinc Honey-Boards are unequalled. His

NONPAREIL BEE-HIVE

presents the latest improvements, suited to the best management yet devised. At the Columbus Centennial it was awarded the

FIRST PREMIUM

over all the leading Hives of the day. His **SECTION SUPERS,** No. 1 and No. 2, for Open-Side Sections, are the very best! Samples of Sections and Zinc, five cents. Price-List free. Address,

DR. G. L. TINKER, 12A10t NEW PHILADELPHIA, OHIO. Mention the American Bee Journal.

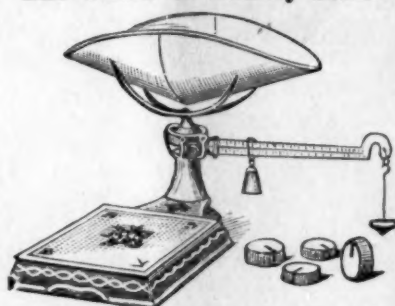
The Hive and Honey-Bee, and Dadant's Foundation. See advertisement in another column.

Send 75 Cents for my Book, entitled—"A Year among the Bees;"—114 pages, cloth bound. Address, **DR. C. C. MILLER,** 20A1t MARENGO, ILLS.

HOME EMPLOYMENT AGENTS wanted everywhere, for the HOME JOURNAL—a grand family paper. Big Cash Premiums. Sample FREE. **THOS. G. NEWMAN & SON,** 923 & 925 West Madison-Street, - CHICAGO, ILLS.

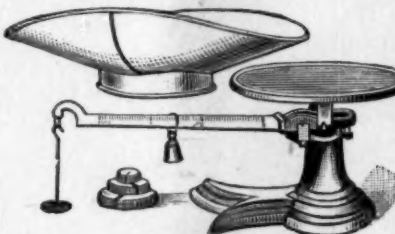
Useful Scales

The Union or Family Scale.



This Scale has steel bearings, and it weighs from 1/2-ounce to 240 pounds. Price, with a Single Brass Beam, as shown in the illustration, \$3.00. With Double Beam for taking the tare, \$3.50.

The Little Detective Scale.



This Little Scale is made with steel bearings, and a brass Beam, and will weigh accurately 1/2-ounce to 25 pounds. It supplies the great demand for a Housekeeper's Scale. Prices:

Single beam, no scoop	\$2.00.
tin	2.50.
Double " no scoop	3.00.
tin	3.50.

All orders filled promptly.

THOS. G. NEWMAN & SON, 923 & 925 W. Madison St., - CHICAGO, ILL.

Langstroth Brood-Frames!

\$5.00 PER 1,000.

WE have 10,000 of the Muth Langstroth Brood-Frames, which are A No. 1; 200 in a box. Will take \$1.00 per box, or \$5.00 per M. This is less than cost. Address,

SMITH & SMITH, 12A1t KENTON, OHIO.



SURE to send for our Circular before buying. **ITALIAN BEES** by the lb.; 2 and 3 frame Nuclei, Queens, Sections, Foundation, &c. Untested Queens in May, \$1.00; in June, 75c.; 3 for \$2.00. Tested Queens, \$1.25 to \$3.00, in their season; 2 and 3 frame Nuclei, \$2.00 to \$4.00, with Queens. Address,

JNO. NEBEL & SON, HIGH HILL, Montg. Co., MO. Our Prices on Bees and Queens are the Lowest! 12Etf Mention the American Bee Journal.

FOR SALE.

100 COLONIES Italian and Hybrid BEES, in Langstroth hives—Italian, \$3.00; Hybrid, \$2.50 per Colony.

Address, **J. W. HOWELL,** 11A2t KENTON, TENN. Mention the American Bee Journal.

LANGSTROTH.

IN the BEE-KEEPERS' REVIEW for March I will be begun a comprehensive review of "Langstroth on the Honey-Bee, Revised by Dadant." It will be continued through several numbers. If you wish for the cream of this work, to learn what it contains new, to know what few points the REVIEW opposes, subscribe at once for the REVIEW. The March number does the best that can be done in answering the query, "Which are the best bees."

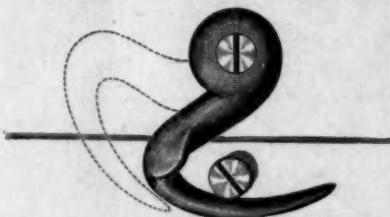
Price of the REVIEW, 50 cts. a year. Samples free. Back numbers furnished.

The Production of Comb Honey is a neat little book of 45 pages—price 25 cts. This book and the REVIEW one year, 65 cts. For \$1.00, the REVIEW will be sent two years, and the book "thrown in." Stamps taken, either U. S. or Canadian.

Address, **W. Z. HUTCHINSON,** 12A1t 613 Wood St., FLINT, MICH. Mention the American Bee Journal.

The Revised Langstroth, and Dadant's Foundation. See advertisement in another column.

Dibbern's Malleable Hook



One-half of the regular size.

FOR fastening loose Bottoms to Hives, and many other useful purposes. The neatest, best and cheapest thing out.

Price, 20 cents per dozen.

Address, **C. H. DIBBERN,** 10A13t MILAN, ILLINOIS.

Mention the American Bee Journal.

A New Book on Bees, and Dadant's Comb Foundation. See advertisement in another column.

ITALIAN BEES, QUEENS, and EGGS from Light Brahma and Wyandotte Poultry One Untested Queen, \$1; three for \$2. Eggs, \$2 for 13. Price-List Free.

Address, **H. G. FRAME,** 10E13t NORTH MANCHESTER, IND. Mention the American Bee Journal.

No. 1, \$2.00... No. 2, \$1.75... No. 3, \$1.50, No. 4, 1.25... No. 5, 1.00... No. 6, .65.

Knife, \$1.15.

On receipt of the above price,

SMOKERS AND KNIVES

will be sent postpaid. Descriptive Circulars will be sent on receipt of request card.

BINGHAM & HETHERINGTON smokers are staple tools, and have been used Ten Years without complaint, and are the only stove-wood, clear-smoke Bee-Smokers. No giving out. No fussing. No going out. No vexation. Address,

BINGHAM & HETHERINGTON, 12A1t ABRONIA, Allegan Co., MICH. Mention the American Bee Journal.

SECTIONS, first-class, \$3.00 per 1,000, and Foundation cheaper than ever. Dealers will do well to get our Prices. **Alsike Clover, Japanese Buckwheat, &c.** Free Price-List and Samples. **M. H. HUNT,** 2E13t BELL BRANCH (near Detroit), MICH. Mention the American Bee Journal.